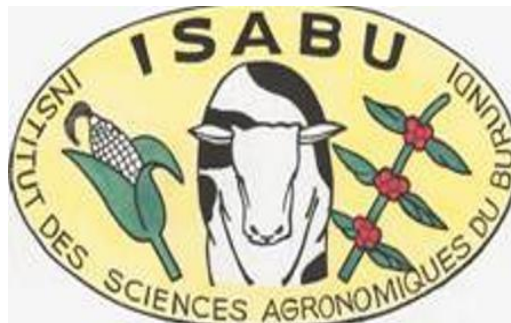


Participant Varietal Selection MYAP and PAPSAD Projects Kayanza, Kirundo, Muyinga Season 2011A



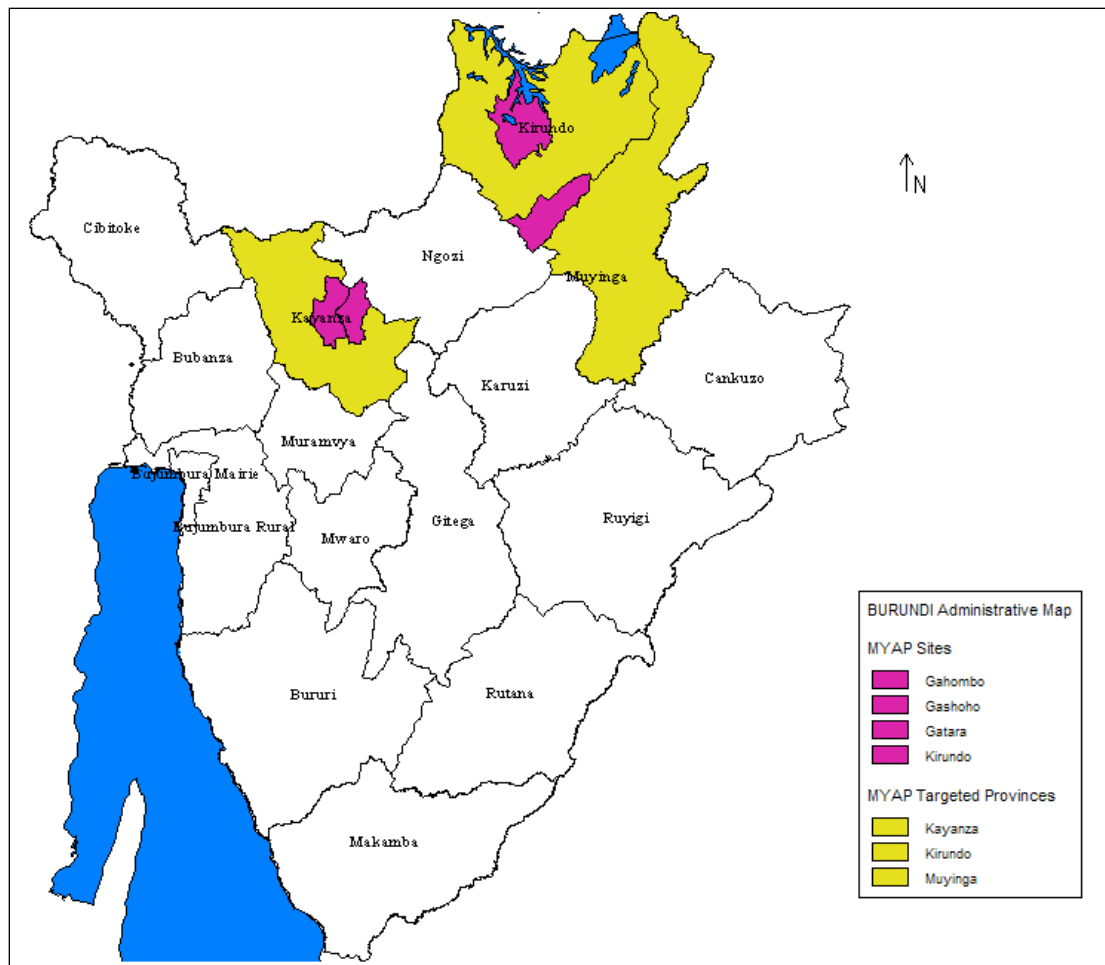
Objectives:

- **Compare performance of new varieties of climbing and bush beans**
- **Compare new varieties with farmers' traditional varieties**
- **Evaluate yields under normal farmer conditions**
- **Introduce participatory variety selection (PVS) to staff and project farmers**



Location:

- Kayanza: Gatara and Gahombo communes
- Kirundo : Kirundo commune
- Muyinga: Gashoho commune



Methodology:

Bush:

- Mother: household received 400 gr of 4 bean varieties that were planted in the same plot
- Baby: 5 women around mother plot received 400 g of each variety

Climbing:

- Mother: 1 household received 100 grams of 4 bean varieties that were planted in the same plot
- Baby: 5 women around mother plot received 100 g of one variety
- All beans were planted on the hillsides.
- All the bean seeds were distributed in a pre-weighed package to ensure quantities distributed

Nutrient management/Fertilizer:

- Mother plot: We requested mother plot farmers to apply a mixture of cow manure and chemical fertilizer (1kg of DAP per are)
- Baby plot: We requested these farmers to plant using normal growing conditions. For example, cow/goat manure, DAP, or nothing.



Received Varieties	Type	Quantity (kg)
AND10	Climbing	20
VCB 81013	Climbing	10
Gasirida	Climbing	5
Twungurumu ryango	Climbing	9.5
Kiyangara	Climbing	10
Vuninkindi	Climbing	10
VCB81012	Climbing	5
Bihogo	Climbing	10
DORE	Bush	10
KATX69	Bush	5
KATX5G	Bush	10.5
KATB1	Bush	10
Musengo	Bush	10.5
KATB9	Bush	10
Mukungugu	Bush	5
Total		140.5



Production in kg per 0.4 kg planted:

Bush variety	Kirundo	Muyinga	Kayanza
Doré	1.3	0.3	0.96
KATX 56	3.3	0.13	1.4
KATB1	3.4	0.12	0.3
KATB9	3.7	0.1	0.9
Musengo	N/A	0.1	1.2

Climbing variety	Kirundo
AND 10	1.5
Gasirida	1.5
VCB 81013	0.4
Twungurumu ryango	0

N.B. Climbing beans have not yet been harvested in Kayanza and Muyinga.

Multiplication rate of mother plot beans per site :

Location	Type	Seed (kg)	Harvest (kg)	Multiplication Rate
Kayanza 1	Bush	2.00	0.92	Negative
Kayanza 2	Bush	2.00	8.30	4
Muyinga	Bush	2.00	0.75	Negative
Kirundo 1	Bush	2.00	11.50	6
Kirundo v1	Climbing	0.50	3.90	8
Kirundo v2	Climbing	0.50	1.50	3

Mother plot for bush bean



Baby plot for climbing bean



Baby plot with virus



Gasirida under banana plant



And 10 under banana plant



Vuninkingi on coffee plant





Constraints to Production:

- Late planting date (mid-November)
- Dry spell after planting and especially after the stand establishment. Without the dry spell, the results could have been better as the germination rate was above 90%.
- Low soil fertility and lack of adequate cow manure and chemical fertilizer
- Hail storm at flowering stage
- Insects(black aphids) and diseases; no chemical spray.



Conclusions:

- Beans for the Season A were under pressure from drought and other factors.
- We can recommend that the farmers should plant earlier, apply organic manure and chemical fertilizer, and spray for insect control to reduce diseases.
- For the new varieties received from ISABU for Season B, we will monitor for:
 - Stand establishment
 - Resistance/tolerance to dry spells
 - Insect and disease resistance
 - Tolerance to poor soil fertility
- Staff have improved capacity to run PVS trials and to collect data.
- Although farmers often did not have high multiplication rate, they were very interested in the process and keen to participate in the ongoing Season B trial

Thank you